Amendment to the Claims:

1. (Currently Amended) A physiological monitoring system which comprises:

at least one sensor for detecting a biological signal, representative of a physiological characteristic of a monitor-wearing patient and generating an electrical signal representative of the biological signal;

at least one sensor for detecting ~~the~~ physical activity of the patient and generating an electrical signal, representative of physical activity;

processing means, coupled to said sensors for processing said electrical signals;

an activity threshold detector coupled to said processing means for receiving said electrical signals representative of physical activity;

a user interface for communicating information about the detected biological signal to the patient;

means for <u>adaptively</u> controlling the communication of <u>the</u> information <u>about</u> <u>the detected biological signal in accordance with a level of the sensed physical</u> <u>activity as determined</u> ~~in response to detection of an activity threshold~~ by said activity threshold detector.

2. (Currently Amended) The system of claim 1, further comprising<u>:</u>

a means for programming said physical activity sensor for operational control at a selected threshold of physical activity.

3. (Currently Amended) The system of claim 1, wherein the ~~physiological~~ ~~characteristic~~ <u>biological signal</u> sensor is adapted to sense cardiac signals.

4. (Currently Amended) The system of claim 1, wherein the ~~physiological~~ ~~characteristic~~ <u>biological signal</u> sensor comprises<u>:</u>

electrocardiography electrodes that detect biological signals representative of the heart beats of the patient.

5.   (Currently Amended)   The system of claim 1, wherein the physical activity sensor comprises:

a transducer that detects chemical, electrical or mechanical characteristics of a monitor-wearing patient, representative of physical activity, including vibrations, motion, acceleration, electromyographic impulses, or sound impulses.

6.   (Currently Amended)   The system of claim 1, wherein the physical activity sensor comprises:

an accelerometer, a pedometer, an electrical noise detector, electronic capacitive sensor, an electromyographic sensor, a skin impedance sensor, or a piezoelectric sensor.

7.   (Previously Presented) The system of claim 1, wherein the physical activity sensor is a passive transducer including a piezoelectric element.

8.   (Currently Amended)   The system of claim 1, further comprising:

a means for wireless transmission of information about the detected biological signal or system functions to a receiver external to the system.

9.   (Currently Amended)   An ambulatory electrocardiography monitoring system for recording electrocardiography signals from a patient, comprising:

a plurality of sensors for detecting a plurality of biological signals, each biological signal representative of a physiological characteristic of a ~~monitor-wearing~~ patient, wherein at least one sensor comprises a one or more electrocardiography electrodes that sense electrocardiography signals from [[a]] the patient and at least one sensor ~~that detects the~~ an activity level of the patient, whereby the sensors generate an electrical signal representative of each respective biological signal;

an arrhythmia threshold detector coupled to the electrocardiography sensor for receiving said electrical signals representative of the electrocardiography signals and determining whether the signals are below or above a preset threshold;

an activity threshold detector coupled to the activity sensor for receiving said electrical signals representative of the activity level of the patient and determining whether the signals are below or above a predetermined threshold;

15   a system error detector for detecting system errors and determining if the detected error meets pre-determined criteria;

processor for controlling ~~the~~ communication of system and biological signal information to the patient through a user interface based on <u>(1)</u> the ~~detection of an activity~~ <u>level of the detected activity level relative to the predetermined</u> threshold ~~by~~

20   <u>of</u> said activity threshold detector, ~~arrhythmia~~ <u>(2) the electrocardiography signals relative to the pre-set</u> threshold ~~by~~ <u>of</u> said arrhythmia threshold detector, and/or <u>(3) the detected</u> system errors ~~by~~ <u>relative to the predetermined criteria of</u> the system error detector.

10. (Currently Amended)   The system of claim 9, wherein the user interface comprises<u>:</u>

an alarm circuit comprising acoustic, tactile, or visual modes of communicating information to the patient, and <u>which</u> mode is determined by

5   processor based on whether the signals from the respective detectors meet pre-determined thresholds.

11. (Currently Amended)   The system of claim 9, wherein processor further comprises<u>:</u>

a calibration means for ~~setting~~ <u>pre-setting</u> the <u>pre-set</u> threshold of the arrhythmia threshold detector based on processing of electrocardiography signals

5   from the patient to generate a baseline of electrocardiography information.

12. (Currently Amended)   The system of claim 9, ~~wherein the threshold of the arrhythmia threshold detector is pre-programmed into~~ <u>further including:</u>

a memory component<u>,</u> ~~of the system~~ <u>the processor saving the electrocardiography signals into the memory component such that electrode signals</u>

5   <u>below the pre-set threshold of the arrhythmia threshold detector are overwritten and</u>

electrocardiography signals above the pre-set threshold are saved in the memory component.

13. (Currently Amended)   The system of claim 9, wherein the physical activity sensor comprises:

a transducer that detects chemical, electrical or mechanical characteristics of a monitor-wearing patient, representative of physical activity.

14. (Cancelled)

15. (Previously Presented) The system of claim 9, wherein the physical activity sensor is a passive transducer including a piezoelectric element.

16. (Cancelled)

17. (Currently Amended)   The system of claim 9, further comprising:

means of wireless communication to an external system, for communication of information about the patient and system state to the patient or to others.

18. (Currently Amended)   A method for communicating information about a patient during ambulatory monitoring of a physiological condition of the patient comprising:

attaching a physiological monitoring system to a patient;

5   sensing one or more selected physiological parameters of the patient;

sensing the a physical activity level of the patient;

comparing the sensed physical activity level to a pre-set threshold to determine whether the physical activity exceeds the pre-set threshold;

detecting a system error to be communicated to the patient and determining

10   whether the detected error meets pre-determined criteria;

generating an error signal based on the system error and transmitting the error signal to the patient via a user interface, if the physical activity of the patient exceeds the pre-set threshold.

19. (Currently Amended) The method of claim 18, wherein the <u>step of detecting</u> physical activity ~~sensor comprises a transducer that detects~~ <u>includes detecting</u> pre-determined chemical, electrical or mechanical characteristics of [[a]] <u>the</u> ~~monitor-wearing~~ patient that are representative of physical activity, wherein the characteristics comprise vibrations, motion, acceleration, electromyographic impulses, or sound impulses.

20. (Cancelled)

21. (Previously Presented) The method of claim 18, wherein the selected physiological parameter of the patient is sensed by at least one sensor comprising two or more electrocardiography electrodes that sense electrocardiography signals from the patient, whereby the sensor generates an electrical signal representative of the selected physiological parameter.

22. (Currently Amended) The method of claim 18, wherein the physiological parameter ~~comprises~~ <u>includes</u> electrocardiography signals and <u>further including:</u> ~~the threshold of the selected physiological parameter of the patient is detected by an arrhythmia threshold detector that determines whether~~

<u>determining from</u> the sensed electrocardiography signals ~~are below or above a selected threshold representing~~ <u>whether</u> an arrhythmic event <u>has occurred;</u>

<u>from the sensed activity level, determining if the patient is active or at rest;</u>

<u>in response to determining that the patient is at rest, saving the arrhythmic event for later communicating arrhythmic events to the patient;</u>

<u>in response to determining that the patient is active, communicating the arrhythmic event information to the patient.</u>

23. (Currently Amended)   A method for communicating information about a patient during ambulatory monitoring of a physiological condition of the patient comprising the steps of:

attaching a physiological monitoring system to a patient;

detecting a selected physiological parameter of the patient;

sensing ~~the~~ physical activity of the patient;

~~detecting a selected threshold of the physical activity of the patient;~~

comparing the detected physiological parameter with a first pre-determined criteria to determine a physiological state of the patient reflecting an alarm condition;

generating an alert signal if the physiological condition of the patient reflects an alarm condition; ~~and~~

transmitting the <u>alert</u> signal to the patient ~~via a user interface (170)~~, if the <u>sensed</u> physical activity of the patient ~~is below the selected threshold~~ <u>indicates the patient is active and inhibiting the transmission of the alert signal if the sensed physical activity of the patient indicates that the patient is at rest</u>.

24. (Previously Presented) A physiological monitoring system comprising:

at least one sensor for detecting a biological signal of a patient;

at least one sensor for detecting physical activity of the patient;

a processor for comparing the detected biological signal with biological signal threshold data and generating a biological signal alarm condition if the threshold is met; and

an alarm system that produces at least two different types of alarms based on the biological signal alarm condition and the physical activity of the patient.

25. (Currently Amended) The physiological monitoring system of claim 24 <u>further including:</u>

<u>a system monitor which detects system malfunctions and classifies the detected malfunctions as critical or non-critical; and</u>

wherein the alarm system further bases the alarm type on <u>the classification of</u> any detected system malfunctions.

26. (Currently Amended) The physiological monitoring system of claim 24 wherein the at least one sensor is worn by the patient wherein the processor determines from detected biological signal and the detected physical signal whether the patient is unconscious, and wherein the alarm system sends an emergency response alarm signal to a remote third party responder in response to determining the patient is unconscious.

27. (New)   The system of claim 1 wherein the activity threshold detector determines when the patient is at rest or active, and further including:

a means for determining when the information about the detected biological signal is urgent or non-urgent.

28. (New)   The system of claim 27 wherein the means for adaptively controlling the communication of the information further:

in response to the information being urgent, communicates the information to the patient;

in response to the information being non-urgent and the patient being at rest, inhibits the communication of the information to the patient;

in response to the information being non-urgent and the patient being active, communicates the information to the patient.

29. (New)   The system of claim 27 further including:

a means for determining when the detected biological information signal is inconsistent with the level of physiological activity; and

wherein the means for adaptively controlling the information inhibits the communication of the information about the detailed biological signal when the means for determining when the detected biological information signal is inconsistent with the level of physiological activity determines that biological information signal is inconsistent with the level of physiological activity.

30. (New)   The system of claim 9 wherein the activity threshold detector determines when the patient is at least at rest and active, and wherein the processor determines when the information is at least urgent and non-urgent; and

wherein the processor adaptively communicates and inhibits the communication of the information in accordance with whether the patient is at rest or active and whether the information is urgent or non-urgent.

31. (New)   The method of claim 23 further including:

in response to the sensed physical activity of the patient indicating that the patient is unconscious, transmitting the alert signal to a third party responder to supply emergency help.

32. (New)   The method of claim 23 further including:

comparing the detected physiological parameter with a second predetermined criteria indicative of a life-threatening physiological state;

in response to determining that the detected physiological parameter is indicative of a life-threatening physiological state, transmitting the alert signal to the patient regardless of the sensed physiological activity of the patient.

33. (New)   The method of claim 32 further including:

in response to determining from the sensed physical activity that the patient is engaged in normal waking activity inconsistent with the life-threatening physiological state, inhibiting the transmission of the alert signal to the patient.